Table 31

Median years to doctorate, by major field of study: Selected years, 1994–2019

(Median years)

ield and time to degree	1994	1999	2004	2009	2014	2019
All fields						
Since bachelor's	10.8	10.5	10.0	9.3	8.8	8.7
Since starting graduate school	8.7	8.2	8.0	7.7	7.3	7.
Since starting doctoral program ^a	na	na	na	na	5.7	5.8
Life sciences ^b						
Since bachelor's	9.6	9.0	8.8	8.5	8.2	8.3
Since starting graduate school	7.7	7.3	7.0	7.0	6.7	6.9
Since starting doctoral program ^a	na	na	na	na	5.7	5.
Agricultural sciences and natural resources						
Since bachelor's	11.0	11.3	10.2	9.8	9.2	8.
Since starting graduate school	8.3	8.2	7.9	8.0	7.6	7.
Since starting doctoral program ^a	na	na	na	na	5.2	4.
Biological and biomedical sciences						
Since bachelor's	8.7	8.2	8.0	8.0	7.7	7.
Since starting graduate school	7.2	6.7	6.7	6.7	6.5	6.
Since starting doctoral program ^a	na	na	na	na	5.7	5
Health sciences						_
Since bachelor's	14.0	14.0	12.8	12.2	12.0	11
Since starting graduate school	11.7	10.7	9.5	9.7	9.3	8
Since starting doctoral program ^a	na	na	na	na	5.3	5
Physical sciences and earth sciences			110	110	0.0	
Since bachelor's	8.1	7.6	7.4	7.3	7.0	6
Since starting graduate school	6.9	6.7	6.5	6.3	6.3	6
	na	na	na	na	5.7	5
Since starting doctoral program ^a	IIa	IIa	IIa	IIa	J.7	
Chemistry Since bachelor's	7.3	6.7	6.8	6.8	6.4	6
Since starting graduate school	6.2	5.9	5.8	5.8	5.7	5
	na				5.3	5
Since starting doctoral program ^a	IIa	na	na	na	3.3	
Geosciences, atmospheric sciences, and ocean sciences	10.6	10.2	0.0	0.7	0.5	
Since bachelor's Since starting graduate school	10.6 8.9	10.3	9.0 7.7	8.7 7.3	8.5 7.3	8 7
Since starting doctoral program ^a	na	na	na	na	5.7	5
Physics and astronomy	0.0	77	7.0	7.0	7.0	
Since bachelor's	8.0	7.7	7.6	7.2	7.3	7
Since starting graduate school	7.2	6.7	6.7	6.7	6.7	6
Since starting doctoral program ^a	na	na	na	na	6.0	5
Mathematics and computer sciences	0.1	0.6	0.5	0.0	7.0	
Since bachelor's	9.1	8.6	8.5	8.0	7.8	7
Since starting graduate school	7.7	7.2	7.1	7.0	6.9	6
Since starting doctoral program ^a	na	na	na	na	5.7	5
Computer and information sciences						
Since bachelor's	9.7	10.0	9.3	8.8	8.5	8
Since starting graduate school	8.1	8.2	7.8	7.6	7.4	7
Since starting doctoral program ^a	na	na	na	na	5.7	5
Mathematics and statistics						
Since bachelor's	8.9	8.0	7.9	7.3	7.0	7
Since starting graduate school	7.2	6.7	6.7	6.7	6.3	6
Since starting doctoral program ^a	na	na	na	na	5.3	5.

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Median years to doctorate, by major field of study: Selected years, 1994–2019

(Median years)

ield and time to degree	1994	1999	2004	2009	2014	2019
Since bachelor's	10.5	10.0	10.0	9.4	9.5	9.4
Since starting graduate school	8.7	7.9	8.0	7.7	7.9	8.0
Since starting doctoral program ^a	na	na	na	na	6.0	6.0
Psychology						
Since bachelor's	9.6	9.0	9.0	8.4	8.3	8.5
Since starting graduate school	7.9	7.2	7.1	6.9	7.0	7.0
Since starting doctoral program ^a	na	na	na	na	6.0	5.9
Anthropology						
Since bachelor's	13.9	12.3	12.0	11.4	11.8	11.3
Since starting graduate school	10.9	10.2	9.7	9.4	9.9	9.
Since starting doctoral program ^a	na	na	na	na	7.7	7.
Economics						
Since bachelor's	9.7	8.9	9.0	8.4	8.3	8.
Since starting graduate school	7.9	7.2	7.0	7.0	6.9	7.
Since starting doctoral program ^a	na	na	na	na	5.7	5.
Political science and government						
Since bachelor's	10.7	10.5	11.0	10.3	10.1	9.
Since starting graduate school	8.7	8.7	8.8	8.4	8.2	8.
Since starting doctoral program ^a	na	na	na	na	6.7	6.
Sociology					• • • • • • • • • • • • • • • • • • • •	
Since bachelor's	11.5	10.6	11.2	10.6	11.0	10.
Since starting graduate school	9.5	8.7	8.8	8.9	9.3	8.
Since starting doctoral program ^a	na	na	na	na	7.0	6.
Other social sciences	110	110	110	110	7.0	0.
Since bachelor's	12.2	12.2	12.0	11.7	11.6	11.
Since starting graduate school	9.9	9.7	9.3	9.2	9.4	9.
Since starting doctoral program ^a	na	na	na	na	6.2	6.
Engineering	III	IIu	na	na	0.2	0.
Since bachelor's	9.0	8.7	8.4	7.9	7.3	7.
Since starting graduate school	7.2	7.2	7.2	6.9	6.5	6.
• • • • • • • • • • • • • • • • • • • •				-	5.2	5.
Since starting doctoral program ^a	na	na	na	na	J.Z	J.
Aerospace, aeronautical, and astronautical engineering Since bachelor's	0.5	0.5	0.2	7.2	6.0	7
	8.5 6.9	8.5 7.2	8.3 7.2	7.3	6.8	7.
Since starting graduate school				6.7		6.
Since starting doctoral program ^a	na	na	na	na	5.3	5.
Bioengineering and biomedical engineering	0.0	7.0	7.2	7.2	67	7
Since bachelor's	8.0	7.9	7.3	7.3	6.7	7.
Since starting graduate school	7.1	6.8	6.2	6.3	6.0	6.
Since starting doctoral program ^a	na	na	na	na	5.3	5.
Chemical engineering	7.0		7.0			
Since bachelor's	7.3	6.2	7.0	6.5	6.1	6.
Since starting graduate school	6.2	5.7	5.7	5.7	5.6	5.
Since starting doctoral program ^a	na	na	na	na	5.0	5.
Civil engineering						
Since bachelor's	10.1	10.3	9.5	9.0	8.4	8.
Since starting graduate school	8.2	8.2	7.7	7.8	7.3	7.
Since starting doctoral program ^a	na	na	na	na	5.0	4.
Electrical, electronics, and communications engineering						
Since bachelor's	8.8	8.5	8.4	8.0	7.6	8.

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Median years to doctorate, by major field of study: Selected years, 1994–2019

(Median years)

ield and time to degree	1994	1999	2004	2009	2014	2019
Since starting graduate school	7.2	7.2	7.3	7.1	6.8	7.3
Since starting doctoral program ^a	na	na	na	na	5.3	5.4
Industrial and manufacturing engineering						
Since bachelor's	10.1	10.4	9.7	9.3	8.3	8.6
Since starting graduate school	7.7	7.8	7.6	7.8	7.0	7.7
Since starting doctoral program ^a	na	na	na	na	5.0	5.0
Materials science engineering						
Since bachelor's	8.7	7.9	7.7	7.5	6.7	6.6
Since starting graduate school	6.9	6.9	6.7	6.7	6.0	6.0
Since starting doctoral program ^a	na	na	na	na	5.0	5.0
Mechanical engineering						
Since bachelor's	9.1	8.8	8.4	7.8	7.3	7.3
Since starting graduate school	7.4	7.5	7.3	6.9	6.5	6.8
Since starting doctoral program ^a	na	na	na	na	5.2	5.3
Other engineering						
Since bachelor's	10.0	9.8	9.3	8.5	8.0	8.
Since starting graduate school	7.9	7.7	7.8	7.3	7.0	7.
Since starting doctoral program ^a	na	na	na	na	5.2	5.
Education	na na	iiu	i i u	i i u	0.2	0.
Since bachelor's	19.7	19.8	17.7	16.3	14.8	14.
Since starting graduate school	15.9	14.7	12.7	12.4	11.7	11.
	na	na	na	na	5.9	5.
Since starting doctoral program ^a Education administration	IId	IIa	IIa	IIa	J. 9	J.
Since bachelor's	21.9	23.8	21.0	18.9	18.0	18.
Since starting graduate school	18.7	18.7	14.8	14.6	14.3	15.
	na	na		na	6.2	5.
Since starting doctoral program ^a Education research	IId	IIa	na	IIa	0.2	J.
Since bachelor's	18.6	17.5	16.0	14.8	13.7	13.
	14.7	13.0	11.7	11.3	10.9	11.
Since starting graduate school						
Since starting doctoral program ^a	na	na	na	na	5.9	5.
Teacher education	21.0	10.6	20.1	10.0	17.0	17
Since bachelor's	21.0	19.6	20.1	18.0	17.0	17.
Since starting graduate school	17.2	15.7	13.7	13.7	11.7	13.
Since starting doctoral program ^a	na	na	na	na	5.8	5.
Teaching fields	16.7	16.5	15.0	15.0	116	- 1.4
Since bachelor's	16.7	16.5	15.3	15.0	14.6	14.
Since starting graduate school	12.9	12.2	11.3	11.3	11.2	11.
Since starting doctoral program ^a	na	na	na	na	6.0	5.
Other education						
Since bachelor's	19.2	19.3	17.4	15.4	14.3	14.
Since starting graduate school	15.3	14.3	12.1	11.3	11.7	11.
Since starting doctoral program ^a	na	na	na	na	5.7	5.
Humanities and arts						
Since bachelor's	12.2	11.9	11.8	11.4	11.0	11.
Since starting graduate school	10.2	9.7	9.7	9.7	9.3	9.
Since starting doctoral program ^a	na	na	na	na	7.0	6.
Foreign languages and literature						
Since bachelor's	11.4	11.5	11.0	10.6	10.3	11.
Since starting graduate school	9.2	9.0	8.7	8.7	8.7	9.

Table 31

Median years to doctorate, by major field of study: Selected years, 1994–2019
(Median years)

Field and time to degree	1994	1999	2004	2009	2014	2019
Since starting doctoral program ^a	na	na	na	na	7.0	6.8
History						
Since bachelor's	11.6	11.3	11.6	11.3	10.8	11.0
Since starting graduate school	9.7	9.5	9.7	9.7	9.0	9.2
Since starting doctoral program ^a	na	na	na	na	7.0	6.9
Letters						
Since bachelor's	11.5	11.0	11.5	11.0	10.6	10.6
Since starting graduate school	9.7	9.2	9.3	9.0	8.9	8.9
Since starting doctoral program ^a	na	na	na	na	6.7	6.4
Other humanities and arts						
Since bachelor's	13.1	12.8	12.0	12.3	11.9	11.6
Since starting graduate school	11.6	10.7	9.7	10.2	10.0	9.8
Since starting doctoral program ^a	na	na	na	na	7.2	6.8
Other ^C						
Since bachelor's	13.2	13.6	12.8	12.3	11.3	11.4
Since starting graduate school	10.7	10.2	9.8	9.6	9.0	9.3
Since starting doctoral program ^a	na	na	na	na	5.3	5.1
Business management and administration						
Since bachelor's	12.2	12.9	12.1	11.9	10.9	11.0
Since starting graduate school	9.7	9.7	9.7	9.1	8.7	8.9
Since starting doctoral program ^a	na	na	na	na	5.0	5.0
Communication						
Since bachelor's	12.3	12.0	11.9	11.5	10.5	10.3
Since starting graduate school	9.7	8.9	9.0	8.7	8.4	8.3
Since starting doctoral program ^a	na	na	na	na	5.3	5.0
Non-S&E fields nec						
Since bachelor's	17.5	16.9	15.0	14.0	13.3	13.4
Since starting graduate school	13.9	13.7	11.0	11.2	10.8	11.1
Since starting doctoral program ^a	na	na	na	na	6.0	5.8

na = not applicable; not available prior to 2014.

nec = not elsewhere classified; S&E = science and engineering.

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

^a Time to doctorate from doctoral program start is based on master's degree entry if the master's degree was at the doctoral institution in the same fine field of study or was a prerequisite to the doctorate; otherwise, it is based on doctoral program entry.

^b Includes agricultural sciences and natural resources; biological and biomedical sciences; and health sciences.

^c Includes other non-science and engineering fields not shown separately.